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TWO NEW FRESH-WATER FISHES (PERCESOCES) FROM NEW GUINEA

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Among some fresh-water fishes collected for The American Museum of Natural History in southern New Guinea in 1933–1934, by Richard Archbold, L. J. Brass, and A. L. Rand, are an apparently undescribed species of the melanotaeniid genus *Rhombatractus*, and another belonging to the atherinid genus *Craterocephalus*.

Rhombatractus archboldi, new species

DESCRIPTION OF TYPE.—No. 12475, American Museum of Natural History: a male, collected Jan. to Feb., 1934, at Wuroi (Oriomo River), British Papua, by Archbold, Brass, and Rand. The river, bordered with forest, here runs through dry savanna, some 20 miles from the coast (twice as far by river) with quite fresh water though well within tidal influence, and the fish collected were mostly taken from small affluent streams.

Length to base of caudal, 76.5 mm. Depth in this length, 2.5; head, 3.5. Eye in head, 3.3; snout, 3.3; interorbital, 3.1; maxillary, 3; greatest width of body (at back of head), 2.2; depth of peduncle, 2.7; its length, 2; pectoral, 1.4 (slightly longer than head without snout); ventral (with filamentous tip), 1.5; spines of first dorsal, 2.1; its longest ray (filamentous), 1.5; spine of second dorsal, 2.7; its longest ray, 2; spine of anal, 3; its longest ray, 2; caudal lobe, 1.2.

Dorsal, I, 4—I, 10; anal, I, 19. Scales, 36; about 16 before dorsal; 2 rows on cheek below eye.

Profile concave and back somewhat elevated; lower outline of body deeply convex; breast, and whole body behind the first dorsal strongly compressed. Interorbital flat; mouth oblique, the jaws about equal; maxillary to under front margin of eye; front aspect of mandible concave. Spines of first dorsal and of anal opposed; caudal moderately forked. Scales on body mostly with slightly fluted edges.

Color pale, darker above; a bold black lateral band about as wide as pupil, through eye to base of caudal; fins, except pectorals, tinged with purplish red.

The paratypes number 22: 14 males, smaller than the type, down to 35 mm., and 8 females of 80 to 42 mm. standard length. Males are deeper, with lateral band bolder. Though the difference in these respects is not great and there is some variation, the eye is consistently more nearly equal to the snout and jaws more nearly equal in males.

The largest female, No. 12476, may be described as follows:

Length to base of caudal, 80 mm. Depth in this length, 3; head, 3.6. Eye in head, 3.7; snout, 3; interorbital, 2.6; maxillary, 2.75; greatest width of body (at back of

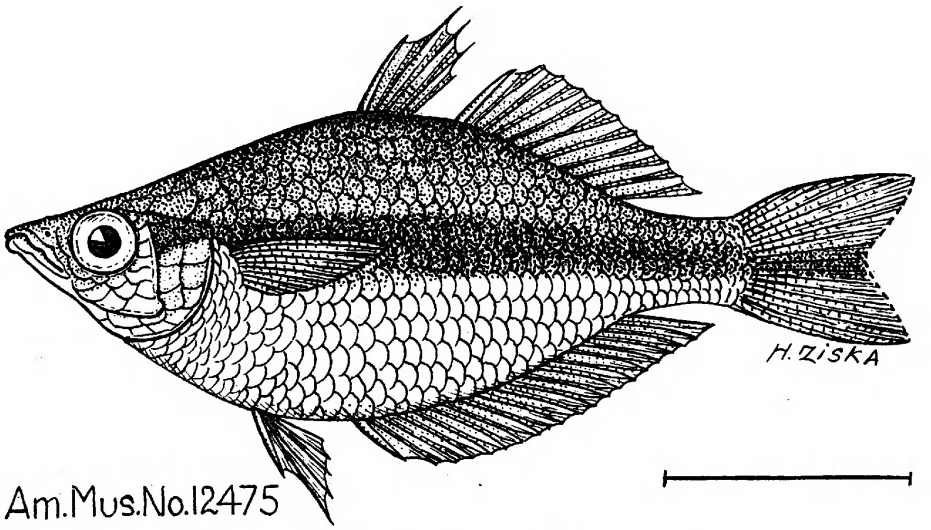

Fig. 1. *Rhombatractus archboldi*, type, male.

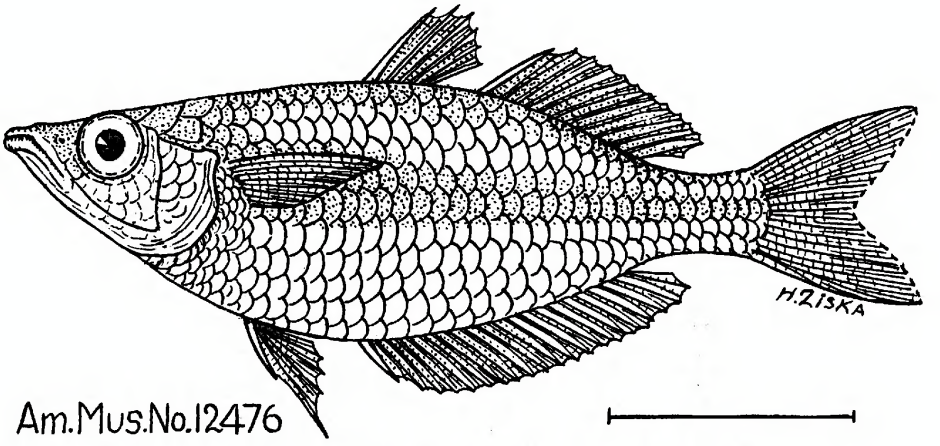

Fig. 2. *Rhombatractus archboldi*, paratype, female.

head), 2.2; depth of peduncle, 3; its length, 2.2; pectoral, 1.5 (very slightly longer than head without snout); ventral (with filamentous tip), 1.6; spine of first dorsal, 2; its longest ray, 1.8; spine of second dorsal, 2.5; its longest ray, 2.4; spine of anal, 4; its longest ray, 2.5; caudal lobe, 1.4.

Dorsal rays, I, 5—I, 11½; anal, 20½. Scales, 32; about 15 before dorsal; 1 or 2 rows on cheek below eye.

Profile very slightly concave, the back slightly elevated, the lower outline somewhat more convex than the upper; body well compressed. Interorbital flat; lower jaw distinctly included; mouth oblique, maxillary not quite to under front margin of eye; upper outline of mandible from in front, concave. Spines of first dorsal and of anal opposed; caudal moderately forked.

Color almost uniform; top of head darker and its lower surfaces paler; an indistinct dark lateral band about as wide as pupil. Fins (except pectorals and ventrals) tinged with reddish purple, anal dusky at margin.

Five males from 55 to 76.5 mm. standard length have depth, 2.9 to 2.5; maxillary in head, 2.5 to 3, reaching to under front of eye in three and not quite so far in two of them; soft rays of second dorsal, 10½ to 12; of anal, 18 to 20; scales 34 to 36.

Five females of from 55 to 80 mm. have depth, 3.4 to 3; maxillary in head, 2.6 to 3, reaching to just past front of eye in one, to under front of eye in two, and not quite so far in two of them; soft rays of second dorsal, 10 to 11½; of anal, 17 to 20; scales 32 to 35.

The species is close to *Rhombatractus goldiei* (Macleay), of which we have a specimen for comparison received from the Amsterdam Museum, collected at Sekanto River, northern New Guinea, 74 mm. standard length. It has depth, 3.3; maxillary in head, 2.7, to just past front margin of eye; soft rays of second dorsal, 14½; of anal, 22½. There are also a number of specimens in the Archbold collection which we so identify from Kubuna, British Papua (some 275 miles east across the Gulf of Papua from the type locality of *R. archboldi*), of which five of 64 to 87 mm. standard length have depth, 3.6 to 3; maxillary in head, 2.7 to 2.8, reaching to under front margin of eye in three, and not so far back in two; soft rays of second dorsal, 12½ to 15; of anal, 22 to 27.

Craterocephalus randi, new species

Description of Type.—No. 12477, American Museum of Natural History, collected in December, 1933, at Kubuna (Kubuna River), British Papua (not far northwest of Port Moresby), altitude 100 meters, by Archbold, Brass, and Rand. The river is here one of deep pools and swift riffles on the edge of heavy lowland forest.

Length to base of caudal, 55 mm. Depth in this length, 5.4; head, 4.1. Eye in head, 3.2; snout, 3.7; interorbital, 3.2; maxillary, 4; greatest width (at back of head), 2; depth of peduncle, 2.8; its length, 1; pectoral, 1.4; ventral, 1.4; longest dorsal spine, 2; longest dorsal ray, 1.7; anal ray, 1.7; caudal (broken), approximately, 1.

Dorsal rays, V—7, anal, 7. Scales, 36; before dorsal, 18 or 19.

Slender, moderately compressed, snout rather blunt. Interorbital almost flat; jaws equal, or lower jaw very slightly projecting; mouth small, maxillary reaching ⅔ to below front margin of large eye, which is well before center of head, the snout being 1.4 in postorbital distance. Origin of first dorsal equidistant from margin of opercle and the center of second dorsal base. Predorsal scales are small forward to the middle of the eye, somewhat irregular on top of the head, a large central and pair of scales in front forming a triangle over the front half of the eye.

A bold black band of approximately the same width throughout, from snout to base of caudal, separated by a pale streak from the dark back, and with two lines of spots following the scale-rows below it, the lower line broken and of smaller spots.

In all there are five specimens, of which the type is the largest. This seems to be a fragile little fish, and all have fins more or less broken, rays and scales unsatisfactory to count. The four paratypes have

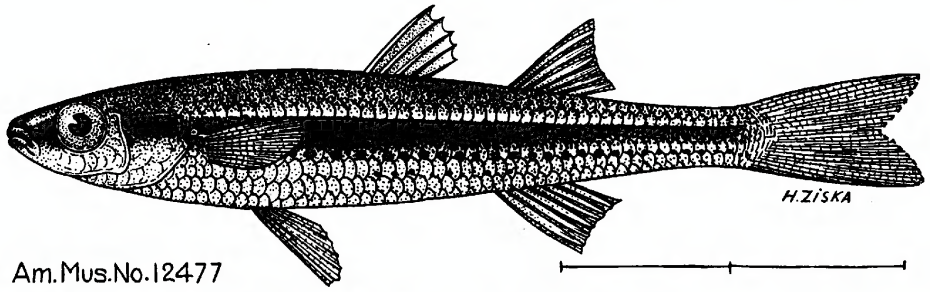

Fig. 3. *Craterocephalus randi*, type.

standard length 32.5 to 53 mm.; depth, 5.1 to 5.8; head, 3.7 to 4; eye, 2.8 to 3; dorsal rays, V to VI—7 to 8; anal, 7 to 9; scales, 36 to 37; before dorsal, 16 to 18.

Squamation on the head is quite unlike that in a larger (71 mm.) "cotype" specimen of *C. nouhuysi* Weber from the Amsterdam Museum, wherein enlarged scales begin at the nape; and the species is doubtless closer to *C. stercus-muscorum* (Günther), with specimens of which,[1] from North Queensland (collected by Raven), it has been compared.

One such of approximately the same size differs as follows.

Length to base of caudal, 56 mm. Head in this length, 3.8. Eye in head, 3; interorbital, 2.5; (least) depth of peduncle, 3.3; its length, 1.4; pectoral and ventral, 1.5. Dorsal rays, VII—8; anal, 9. Scales, about 34; predorsal, 15. Snout moderately pointed; lower jaw appreciably projecting; origin of first dorsal appreciably nearer margin of opercle than to origin of second dorsal.

A black band from snout to base of pectoral, continued more narrowly back as a streak to base of caudal; on the body there are two very regular rows of spots above and two below it, following the rows of scales.

[1]Nichols and Raven, 1932, Amer. Naturalist, LXVI, p. 192, Fig. 3.